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Sourcing Simplified

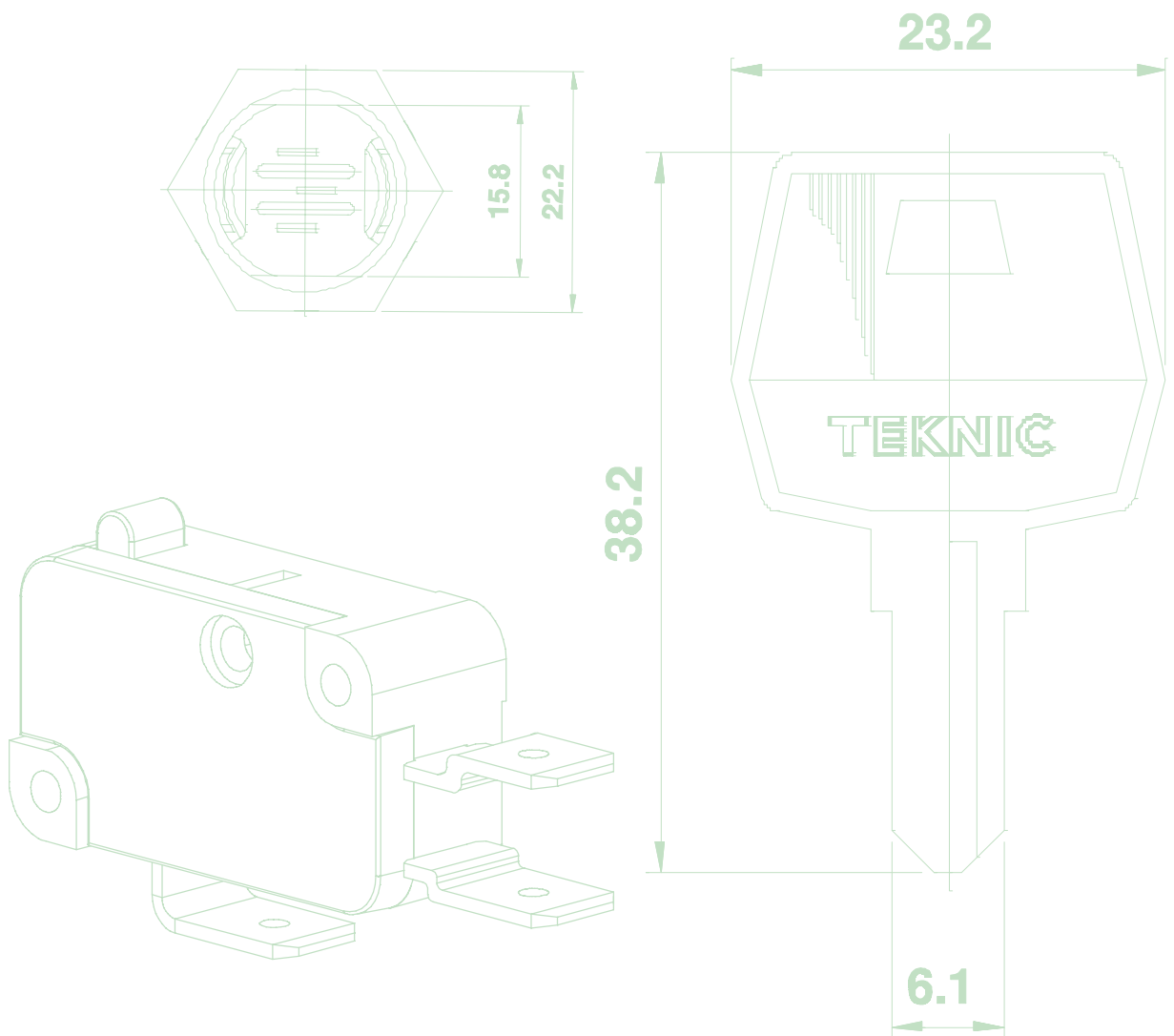


# APPLIANCE SWITCHES

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Circuit Breaker For Equipment (CBE)

TEKNIC



## CIRCUIT BREAKERS FOR EQUIPMENT (CBE)



The TR11 circuit breaker for equipment(CBE) is a single pole, push to reset, thermally operated overload protector, providing reliable trip free operation on overloads and short circuits within maximum breaking capacity specified. The trip mechanism is of a latch type and a high contact force can be maintained until the unit trips. This prevents contact bounce and reduces the risk of contact welding.

**APPLICATION:** Main applications are protection of single phase Motors, Transformers, UPS, Power strips, Solenoids etc., against damage due to over current conditions.

**OPERATION :**The mechanism of the circuit breaker is designed to open the contacts in the event of a current flow in excess of the rated current according to the time/current characteristics of the device. A thermo bimetal strip, which has the advantage of being immune to high inrush currents and line transients, is heated by an over current and deflects, there by releasing the latch mechanism. The contacts open even if the reset button is manually held in the closed position. This is known as trip free mechanism. The contacts open and close with a positive snap action and the tripped state is clearly indicated by the extended projection of the reset button.

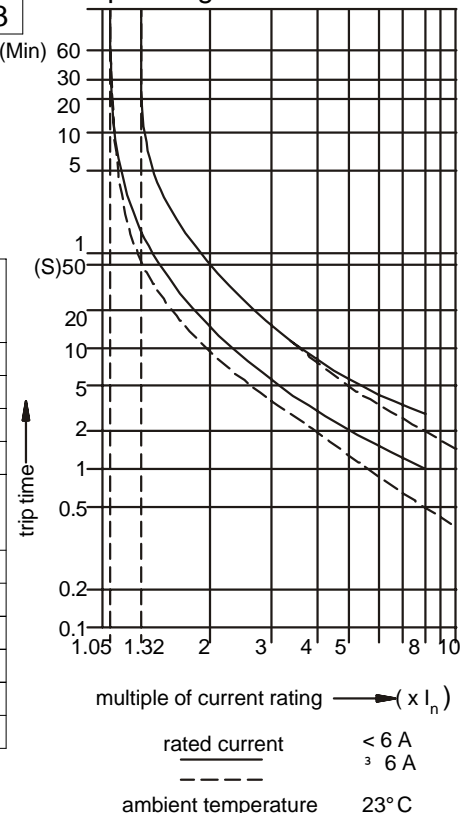
**TIME CURRENT CHARACTERISTICS :**The standard characteristic is valid for ambient temperature of 23°C. If the device is to be used in an ambient temperature other than +23°C allowance must be made when selecting the current rating according to

The following guide lines :

Ambient temp. C	-20	0	+10	+20	+30	+40	+50	+60
Multiplication Factor	0.8	0.9	0.96	1	1.05	1.12	1.2	1.3

Example : Normal continuous current : 1.8 A  
 Ambient temperature : 40 C  
 Multiplication factor : 1.12  
 Recommended current rating : 1.8 x 1.12=2.016  
 Select the nearest : 2 A

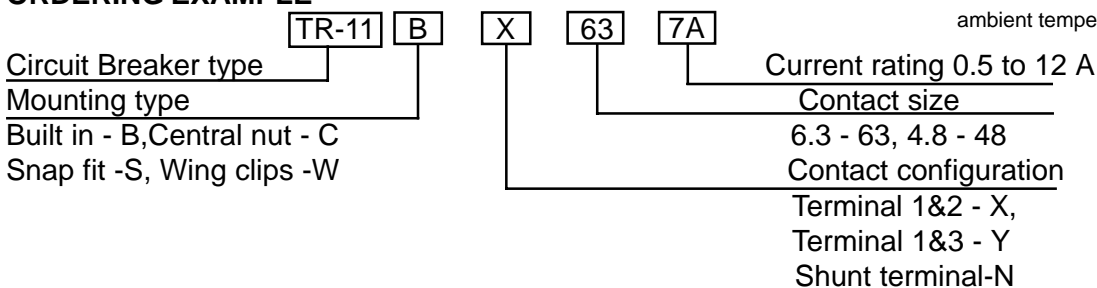
Operating characteristic



### TECHNICAL DATA

Standard current rating in(Amp)	0.5 0.9,1.0,1.2,1.5,1.8, 2, 2.2,2.5,2.7, 3, 3.3,4,5,6,6.5,7,8,9,10,12
Rated voltage	240V~ 50/60 c/s 32V DC / 24V DC (VDE)
Initial insulation resistance	> 100 megohms. (As per IEC 60934)
Dielectric strength	1.5 KV for One minute.(As per IEC 60934)
Overload switching capacity	6x In~, 4x In - (As per IEC 60934)
Maximum breaking capacity	8x In for <6A, 6x In or 60 A (whichever is higher) for ≥ 6A,
Power loss	1 - 2 Watts.
Operating temperature	Maximum 60 C Amb.
Operational life at 2xIn	1000 Cycles
Limited short circuit current	1000 Amps PC 1
Applicable standards	IEC 60934, CSA 22.2 No. 235, UL-1077
Approvals	

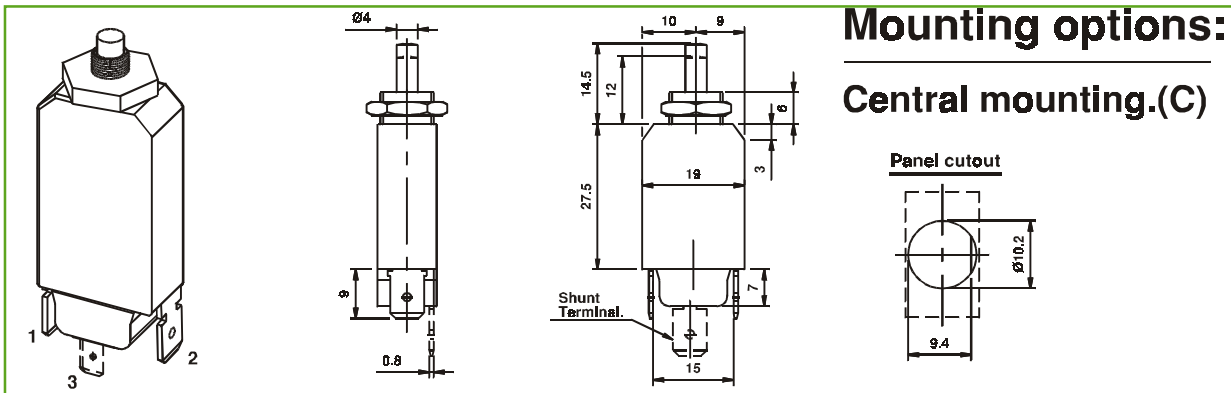
### ORDERING EXAMPLE



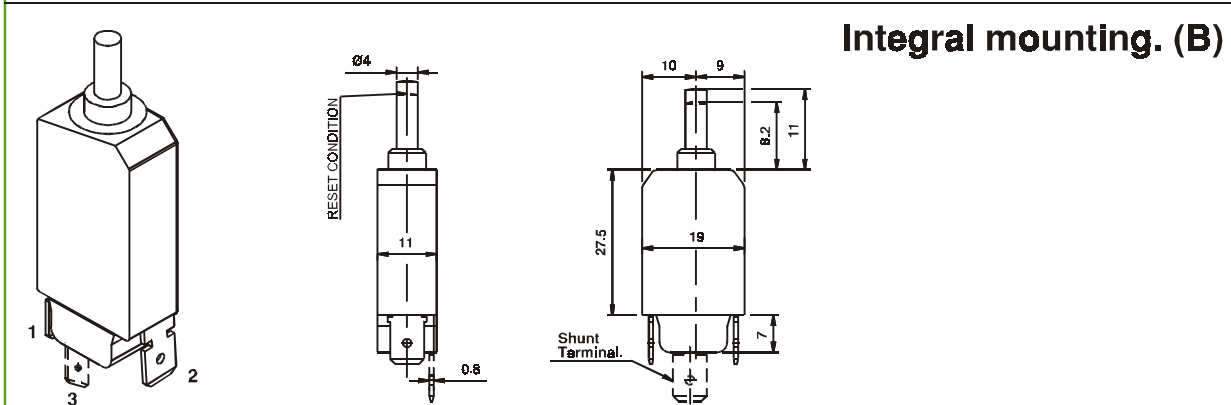
## CIRCUIT BREAKERS FOR EQUIPMENT (CBE)

### Mounting options:

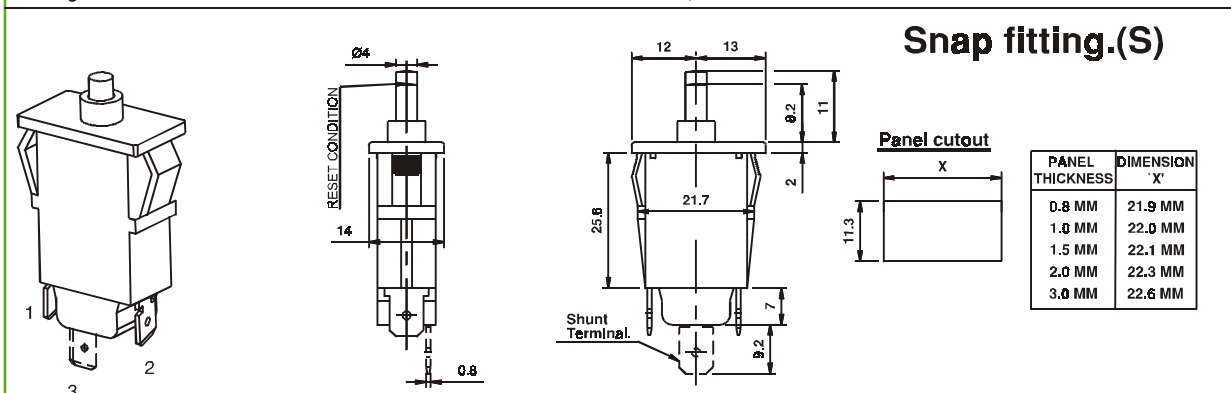
#### Central mounting.(C)



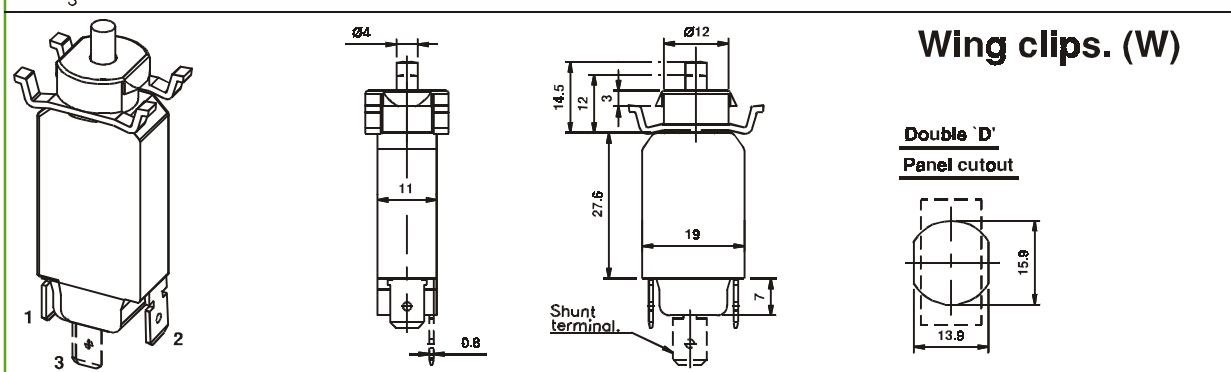
#### Integral mounting. (B)



#### Snap fitting.(S)



#### Wing clips. (W)



Note: Preferably, use Terminal 1 and 2 for  $I_n < 8A$   
 Terminal 1 and 3 for  $I_n > 8A$